What is now claimed is:

CLAIMS

1. A system for determining whether an imaging system is in a proper operating condition, said system comprising:

an illumination modulator for providing a desired modulated illumination field at an image surface;

a detection unit including a slit opening for receiving a portion of said modulated illumination field;

average power sample means for determining the average power sample value of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said average power sample value has changed significantly since a previous scan; and

variation power sample means for determining the variation in power sample values of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said variation in power sample values has changed significantly since a previous scan.

2. A system as claimed in claim 1, wherein said illumination modulator includes a grating light valve.

3. A system as claimed in claim 1, wherein said average power sample means includes an average power sample value for a prior scan.

4. A system as claimed in claim 1, wherein said variation power sample means includes information indicative of a variation in power sample values for a prior scan.

5. A system as claimed in claim 1, wherein said variation power sample means includes maximum and minimum sample values for a previous scan.

6. A system as claimed in claim 1, wherein said variation power sample means includes maximum and minimum sample values for a grating light valve shutter.

7. A system for determining whether an imaging system is in a proper operating condition, said system comprising:

an illumination modulator for providing a desired modulated illumination field at an image surface;

a detection unit including a slit opening for receiving a portion of said modulated illumination field;

average power sample means for determining the average power sample value of a set of scans of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said average power sample value has changed significantly since a previous set of scans; and

variation power sample means for determining the variation in power sample values of a set of scans of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said variation in power sample values has changed significantly since a previous set of scans.

8. A system as claimed in claim 7, wherein said illumination modulator includes a grating light valve.

9. A system as claimed in claim 7, wherein said average power sample means includes an average power sample value for a prior set of scans.

10. A system as claimed in claim 7, wherein said variation power sample means includes information indicative of a variation in power sample values for a prior set of scans.

11. A system as claimed in claim 7, wherein said variation power sample means includes maximum and minimum sample values for a previous scan.

12. A system as claimed in claim 7, wherein said variation power sample means includes maximum and minimum sample values for a grating light valve shutter.

13. A system as claimed in claim 7, wherein said average power sample value of a set of scans is determined for a set of five scans.

14. A system as claimed in claim 7, wherein said variation in power sample values of a set of scans is determined for a set of five scans.